

Amendment under 37 CFR 1.111
Application No. 09/674,167
March 17, 2003

applicants hereby submit new claim 28 which is similar to amended claim 1.

Regarding claim 1, lines 1-2, the Examiner stated that the term "at least as a portion of a filter material" is vague and indefinite as to the limitation intended. By this amendment, this phrase has been deleted from the new claims and it is submitted that this point has been overcome.

Regarding claim 1, lines 3-5, the Examiner stated that the term "being introduced into ..." appeared to be a method step and is hence indefinite as to the product limitation intended. The Examiner also advised that an amendment reciting that the recited fiber contains a functional group of the type recited would overcome this portion of the rejection. New claim 28 has been amended to change "at least one chelate-forming functional group being introduced into a molecule of a natural fiber and/or a regenerated fiber" to "at least one of a natural fiber and a regenerated fiber containing at least one chelate-forming function group ...". It is respectfully requested that this change overcomes this rejection point.

Regarding claim 1, lines 8-9, the Examiner stated that the term "having an amino group and at least two hydroxyl groups combined with carbons" was vague since constituent "G" in formula

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1 did not have to be a polyhydric alcohol and constituent "R" in this formula could be a hydrogen atom. By this amendment, applicants have written new claim 28 so that it does not include the phrase "having an amino group and at least two hydroxyl groups combined with carbons". It is respectfully submitted that this change overcomes this rejection point.

Regarding claim 1, line 13, the Examiner stated that the term "residue of a chain sugar alcohol" is vague and indefinite as to the material intended. Applicants believe that the phrase "residue of a chain sugar alcohol" is not vague because the phrases "sugar alcohol" and "residue of a chain sugar alcohol" are well known in art. Applicants respectfully submit that U.S. Patent Nos. 6,200,481, 6,008,177, 5,830,920 and 5,521,160 all claim either a "residue of a sugar alcohol", "a chain sugar alcohol residue" or "sugar alcohol residue". Therefore, applicants respectfully submit that the phrase "residue of a chain sugar alcohol" is definite and should be acceptable.

Regarding the rejection of dependent claim 3, lines 2-3, as being indefinite, the Examiner stated that the term "in which an amino group is eliminated from ..." was indefinite. Applicants hereby submit new claim 29 to replace original dependent claim 3. New claim 29 recites "G is a residue lacking an amino group

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selected from D-glucamine, D-galactamine, D-mannosamine, D-arabitylamine, N-methyl-D-glucamine, N-ethyl-D-glucamine, N-methyl-D-galactamine, N-ethyl-D-galactamine, N-methyl-D-mannosamine and N-ethyl-D-mannosamine". It is respectfully submitted that this change overcomes this rejection point.

Regarding the rejection of claims 6-8 as being indefinite, claim 6 has been canceled to overcome this rejection. The Examiner also stated that claims 6-8 appeared to merely recite process steps and therefore they were indefinite as to the product limitations intended.

Applicants hereby submit a new independent process claim 38 that is similar to original claims 7 and 8. New claim 38 recites "reacting the functional group with: an amine compound represented by formula A" and "an acid anhydride of a polycarboxylic acid represented by formula B". Applicants respectfully submit that this change overcomes this rejection.

Applicants hereby submit new claim 35 to replace original claim 10. Regarding claim 10, the Examiner stated that claim 10 was vague and indefinite as to the limitation intended. Applicants have rewritten this claim to recite "an introduced amount of the chelate-forming functional group calculated by following equation is greater than or equal to 10% by weight of

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the fiber". It is respectfully submitted that this change overcomes this rejection point.

Regarding the rejection of claim 15 as being indefinite, the Examiner stated that the term "allowing a liquid to pass through a device" was vague and indefinite as to the process steps intended. Applicants hereby submit new independent process claim 36 to recite this subject matter. It is respectfully requested that this change overcomes this rejection point.

Regarding the rejection of independent claim 17 as being indefinite, the Examiner stated that the term "processing a natural fiber and/or a regenerated fiber into a filter" was vague and indefinite as to the manipulative steps intended. Applicants hereby submit a new independent claim 38 which changes "processing a natural fiber and/or a regenerated fiber into a filter, said fiber having, in a molecule, a functional group being reactive with a chelate-forming compound, and allowing the reactive functional group in said fiber molecule to react with" to "providing a natural fiber and/or a regenerated fiber having a functional group and reacting the functional group ...". It is respectfully requested that this change overcomes this rejection point.

Regarding claim 17, lines 3-4; claim 23, line 2; claim 24,

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line 2; and claim 25, lines 7-8, the Examiner stated that the recitation that the fiber has a functional group "in a molecule" was vague and indefinite as to the limitation intended. By this amendment, applicants have deleted the phrase "in a molecule" in new claim 38. Applicants hereby submit new independent claim 42 which is similar to original claims 23 and 24. Applicants have also deleted the phrase "in a molecule" in new independent claim 42. Applicants have also included the same features related to "G" and "R", which are in new claim 28, into new claim 38.

Regarding the rejection of claim 25 as being indefinite, applicants hereby submit new dependent claim 43 to replace claim 25. Claim 43 recites "wherein at least one compound selected from the group consisting of amino acids, iminodiacetic acid, iminodisuccinic acid, ethylenediaminediacetic acid, thioglycolic acid, thiomalic acid, thiosalicylic acid, and mercaptopropionic acid is used as the chelate-forming compound". Applicants have also deleted the phrase "in a molecule". It is therefore respectfully submitted that this change overcomes this rejection point.

Regarding the rejection of claim 26 as being indefinite, claim 26 has been canceled to overcome this rejection point.

The Examiner also objected to the use of parenthesis and


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brackets throughout the claims and he specifically identified claims 1, 7, 10, 17 and 26. Applicants have deleted all parentheses and brackets to overcome this point. It is respectfully requested that these changes overcome this rejection point.

In view of foregoing claim amendments and remarks, it is respectfully submitted that the application is now in condition for allowance and an action to this effect is respectfully requested.

If there are any questions or concerns regarding the amendments or these remarks, the Examiner is requested to telephone the undersigned at the telephone number listed below.

Respectfully submitted,


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